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Science and Technology for Tomorrow's Air and Space Force

Success Story

DR. JOHN MAGUIRE HONORED AS SME FELLOW



Selection as a Society of Manufacturing Engineers (SME) Fellow is a highly sought and prestigious honor given to leaders who have made outstanding contributions to the manufacturing profession. The award recognizes individuals who have made clear, recognized, and respected contributions to the field of manufacturing.

Dr. John Maguire, a research leader and principal engineer for the Materials and Manufacturing Directorate, has been selected as a Fellow in 2002. Dr. Maguire's selection and outstanding efforts are testimony to the high degree of dedication and professionalism of the men and women of the Directorate.



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Accomplishment

The SME selected Dr. Maguire as a Fellow for his outstanding contributions to the field of manufacturing. He is widely respected and recognized for contributions to the areas of computer modeling and simulation, namely the field of artificial intelligence and neural networks, and intelligent processing and manufacturing of materials. The SME will induct him into the SME College of Fellows during the fall board meeting in Charlotte, North Carolina in 2002.

Background

In his current position as a materials research leader and principal engineer for the directorate's Manufacturing Technology Division, Materials Process Design Branch, Dr. Maguire contributed to soft and interfacial matter research. He also contributed to the field of material processing and developed new techniques in computer simulation and molecular dynamics.

Advanced future material applications, such as high-power radars, ultra lightweight airframe structures, and large adaptive optics, require the development of new materials whose characteristics far exceed the capabilities of current materials. Dr. Maguire's discoveries in the areas of soft, interfacial, granular, and nanomaterials could provide new forms of matter with engineered properties and controlled structures.

Dr. Maguire was part of an Electronic Prototyping Research Team recognized as an Air Force Office of Scientific Research "Star Team" for the 2-year period of 2000 and 2001. Electronic prototyping provides the means by which a researcher can conduct materials research, which is normally time-consuming and costly, in a virtual environment.

In 2001, Dr. Maguire received the Dr. J. Keith Brimacombe Award from the Intelligent Processing and Manufacturing Materials Conference, an international community of people interested in intelligent software and hardware applications. During his career, Dr. Maguire published the results of his materials processing and manufacturing work in a wide range of scientific and technical literature.

Additional information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (02-ML-25)